

Applicant: Cracknell et al.
Application No.: 10/587,873

REMARKS

Claim 18 is currently amended to specify that the slot in the supporting surface has an opening, the opening being of sufficient width to receive the adhesive applicator. Basis for this amendment can be found at Figure 5 and it follows from the description at paragraph [0033]: the applicator is “between the support surfaces” and “the nozzle 23a of the glue applicator 23 is positioned to apply cold glue along the inside of the fold line of the sheet 2.” As the inside of the fold line is above the supporting surface, the nozzle must either extend through or be extendable through the slot when glue is applied.

Cracknell does not disclose use of an adhesive applicator in any way. Misicka discloses an applicator that is arranged to apply glue from above as the signatures are carried by a chain conveyor. The previously-presented version of claim 18 explicitly stated that the supporting surface included a slot to separate the support surfaces. Misicka does not disclose a slot, as claimed. In fact, Misicka states at column 6, lines 64 to 66 that “each link 22 of chain conveyor 20 has sides 23 and 25 which are formed at an angle which, typically, is approximately 60 degrees”. As shown in Figure 2, the sides 23 and 25 of links 22 would appear to be almost flush with the support surfaces such that “signature 17’ fully rests along its lower surface while it is propelled beneath adhesive applicator 37” (column 7, lines 3 – 6).

The claimed arrangement is more adaptable than that of Misicka. Because

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the support surface of Misicka is essentially solid: “the signature fully rests along its lower surface”, there is no opportunity to apply adhesive from below. By inclusion of a slot, as required in the claims, the apparatus may be adapted to deliver adhesive either from above or below. Glue is therefore applied to either the inside or outside fold line, as required. The flexibility of the present apparatus with regard to gluing configuration is set out in the published application at paragraphs [0033] and [0034].

In order to clarify this distinction from Misicka, claim 18 has been amended to recite the slot more explicitly: the slot is of sufficient size to receive the nozzle of the adhesive applicator. This enables gluing to be carried out either from above or from below, this latter case requiring the nozzle to pass through the slot in order to apply glue to the folded sheets on the supporting surface.

Previous claim 20 has been rewritten as an independent claim, requiring the supporting surface to have a slot through which the adhesive applicator delivers adhesive to the inside of the fold line of selected sheets. The Examiner has rejected this claim as being obvious over Cracknell in view of Misicka and further in view of Leu (US 5,716,182). Leu shows in Figs 3A – 3D a perforating needle that passes through a stack of sheets into a pot of adhesive. The adhesive is applied to the inside of the stack of sheets as the needle is withdrawn. Other embodiments describe the adhesive applied to the outside fold as the needles pierce the stack. It is

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apparent however that Leu and Misicka have conflicting requirements that cannot render the combination of their disclosures obvious. As stated above, Misicka teaches that the sheets should be fully supported as adhesive is applied. Leu on the other hand does not support the sheets in this manner.

In order to apply adhesive to the inside of a stack of sheets, Leu necessarily dispenses with the degree of support offered by Misicka and locates a pot of adhesive in the support. In fact, the pot cannot be located in a supporting surface that includes two inclined support surfaces separated by a gap. Leu shows that in order to apply adhesive from below, a flat supporting surface is required (see Fig 3). As a consequence adhesive is not applied to a folded sheet in any way. It will be clear to one skilled in the art that the adhesive applicator described in Leu is incompatible with both the inclined support surfaces and sheet folding apparatus of the present invention.

In summary therefore, claim 18, as amended, is not obvious in view of Cracknell and Misicka. The apparatus described in Cracknell makes no provision for adhesive binding. Misicka does describe a system adapted to apply adhesive but teaches that, in order to do so, the sheets to which the adhesive is applied must be fully supported. In order to provide this, a predominantly solid supporting surface is required, which in turn restricts adhesive application from above the sheets only. The improved flexibility offered by apparatus in accordance with the present

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invention is neither disclosed nor hinted at in Misicka. With regard to claim 20, one skilled in the art would simply not seek to combine the disclosures of Cracknell, Misicka and Leu. Leu and Misicka contain contrary teachings that simply do not lend themselves to any combination.

Conclusion

In view of the foregoing amendment and remarks, the applicant respectfully requests allowance of all pending claims, and allowance at an early date would be appreciated.

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Should the examiner have any questions or comments, the examiner is invited to contact the undersigned by telephone so that any outstanding issues can be expeditiously resolved.

Respectfully submitted,

Cracknell et al.

By /Stephen B. Schott/
Stephen B. Schott
Registration No. 51,294

Volpe and Koenig, P.C.
United Plaza, Suite 1600
30 South 17th Street
Philadelphia, PA 19103
Telephone: (215) 568-6400
Facsimile: (215) 568-6499

SBS/lat